Applicant: Verdoes

Serial No: 10/574,887

Filed: March 12, 2007

Page 2

Our Docket: 294-247 PCT/US

Please amend claims 1-4 and 6-14 and 16 as follows:

Claim 1. (Presently amended): [Method] A method for removing at least one constituent from

a solution[,] comprising:

[-] i. forming a liquid mixture by bringing together said solution and a heterogenous

particulate seed material under conditions or in the presence of one or more substances which

cause the constituent to be removed to crystallize out on the surface of the seed material; and

[-] ii. separating the seed material having the constituent to be removed crystallized out

thereon from the liquid mixture by passing the liquid mixture through a filter, wherein the

pore size of the filter is greater than the particle size of the seed material.

Claim 2. (Presently amended): [Method] The method according to claim 1, wherein the

particle size of the seed material is from 0.1 to 50 µm.

Claim 3. (Presently amended): [Method] The method according to claim 1, wherein the pore

size of the filter is equal to or less than 150 μm.

Claim 4. (Presently amended): [Method] The method according to claim 1, wherein the

particle size of the seed material is from 5 to 25 µm.

Claim 5. Cancelled.

Claim 6. (Presently amended): [Method] The method according to claim 1, wherein one or

more substances cause the constituent to be removed to crystallize out on the surface of the

seed material.

Claim 7. (Presently amended): [Method] The method according to claim 1, wherein the seed

material comprises an inorganic material selected from the group consisting of a mineral clay

types, silica particles, silicates or diatomes.

Applicant: Verdoes Serial No: 10/574,887

Filed: March 12, 2007

Our Docket: 294-247 PCT/US

Page 3

Claim 8. (Presently amended): [Method] The method according to claim 1, wherein the seed

material comprises an organic material selected from the group consisting of cellulose,

stearate and lactose.

Claim 9. (Presently amended): [Method] The method according to claim 1, which method is

used to prepare particles with a distinct morphology, size distribution and polymorphology.

Claim 10. (Presently amended): [Method] The method according to claim 1, wherein the

solution is water or an aqueous solution.

Claim 11. (Presently amended): [Method] The method according to claim 10, which method

is used to soften water and wherein the pH of the solution is being increased to cause CaC03

to precipitate on the seed material.

Claim 12. (Presently amended): [Method] The method according to claim 1, which method is

used to remove heavy metal ions from the solution by way of crystallizing out metal salt or

metal hydroxide on the surface of the seed material.

Claim 13. (Presently amended): [Method] The method according to claim 1, which method is

used to remove anions from the solution by way of crystallizing out a salt of the anions on the

surface of the seed material.

Claim 14. (Presently amended): [Method] A method for preparing a particulate material

according to claim 1, wherein the particulate material comprises the particulate seed material

and the constituent that has crystallized out on the surface of the seed material.

Claim 15. (original): Particulate material obtainable by the method according to claim 14.

Claim 16. (Presently amended): Apparatus for removing at least one constituent from a

solution comprising a vessel, one or more filters that are located inside the vessel, at least one

inlet for introducing a liquid mixture which comprises the solution from which the

Applicant: Verdoes Serial No: 10/574,887 Filed: March 12, 2007

Our Docket: 294-247 PCT/US

Page 4

constituent needs to be removed, a heterogenous particulate seed material on the surface of which the constituent to be removed will crystallize out and optionally one or more substances that cause the constituent to be removed to crystallize out on the surface of the seed material, at least one outlet for discharging the solution from which the constituent is removed which outlet(s) is (are) connected to the one or more filters, and an outlet for withdrawing seed material having the constituent to be removed crystallized out thereon.